

**VERIZON WIRELESS FACILITY - DEER SPRINGS
124 VISTA MERRIAM, SAN MARCOS CA 92069
ALTERNATE SITE ANALYSIS**

PROJECT SITE

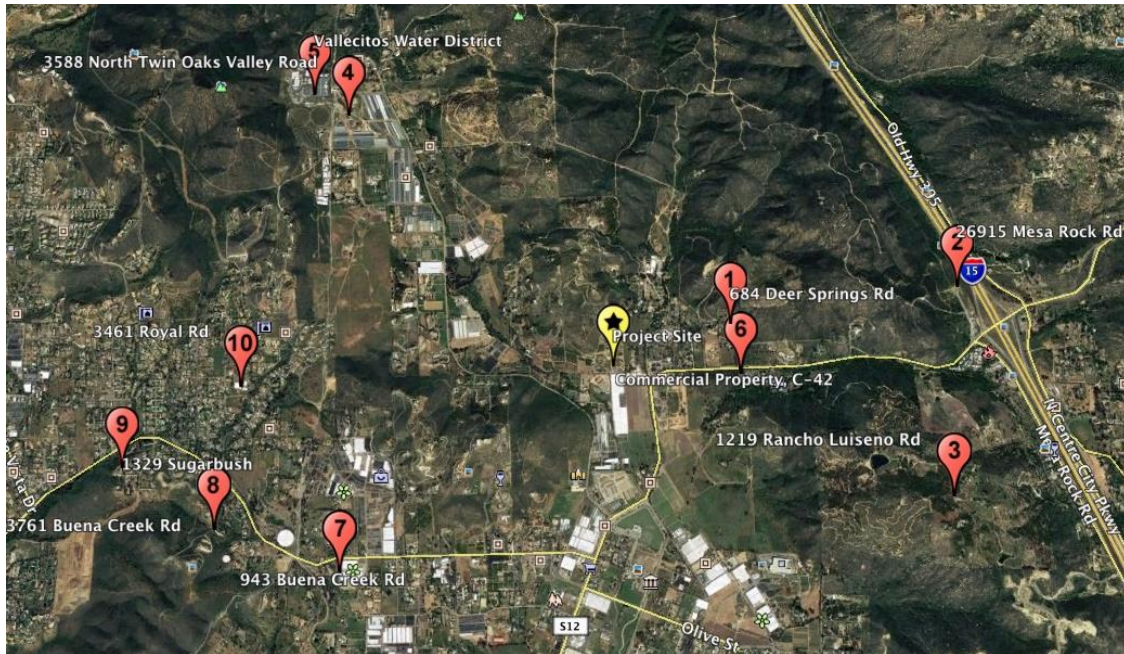
The proposed project is zoned A-70, Limited Agriculture, which is classified as rural use in Section 6983 R of the County Zoning Ordinance, and is not a preferred zone. The proposed design is for 60-foot tall Mono-Eucalyptus tree with twelve (12) antennas, a two-foot (2') microwave dish, twelve (12) RRU's and two (2) Raycaps. The target coverage area of the proposed site is east and south along Deer Springs Road, north, west and south along North Twin Oaks Valley Road and includes the surrounding rural residential community in the Twin Oaks Valley.

Currently the on-site use consists of a residence, citrus grove, and various horticulture crops. Project site elevation is 794 feet above mean sea level (AMSL), a ground elevation lower than previously proposed sites in the area, which required the faux eucalyptus to be raised to the proposed 60-foot level to achieve better coverage in the area. The additional height also allows for another carrier to co-locate on the tree structure. Surrounding properties in the area are designated A-70, agricultural, which is not a preferred zone according to Section 6986 of the County Zoning Ordinance.

In addition, an 8-foot, 8-inch by 13-foot, 4-inch by 8-foot, 2-inch high custom concrete block equipment enclosure is proposed to house the radio equipment, one (1) GPS and emergency stand-by diesel generator (15 Kw) with a 54 gallon tank. The enclosure will be set within the existing hillside and topped with a steel trellis that is partially open at the top for ventilation. There will be a stepped-up, three sided retaining wall surrounding the equipment area, which will match the retaining wall along the driveway near the residence on site. The equipment area will be at a ground level of 785 feet above mean sea level (AMSL) Access to the project site will be via an existing 12-foot wide road, further described on the project plans. Utilities will be provided via an existing overhead power pole along Vista Merriam Road and routed via a new underground utility trench to the equipment enclosure, along the existing access road.

PREFERRED LOCATION SITES PER SECTION 6986 OF THE COUNTY ZONING ORDINANCE

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AERIAL PHOTO OF ALTERNATE SITES

1. 684 Deer Springs Rd., ZAP97-022, existing T-Mobile flagpole.
2. 26915 Mesa Rock Rd., ZAP99-023, STP95-027, P15-017, existing AT&T, Sprint/T-Mobile monopoles and recently approved MonoEucalyptus.
3. 1219 Rancho Luiseno Rd., P88-074, lattice tower.
4. 3588 North Twin Oaks Valley Rd., P13-006, existing Verizon water tower.
5. Vallecitos Water Treatment Facility.
6. Commercial property, C-42 zone, Golden Door Spa.
7. 943 Buena Creek Rd., existing T-Mobile and AT&T sites.
8. 3761 Buena Creek Rd., existing Sprint site.
9. 1329 Sugarbush Dr., existing Sprint site.
10. 3461 Royal Rd., existing T-Mobile and AT&T sites.

EXISTING WIRELESS FACILITIES

1. **684 Deer Springs Road.** A T-Mobile flagpole with three antennas is located at this address (ZAP97-022). Collocation with T-Mobile or the addition of another flagpole is not technically feasible due to the need for multiple antennas with different technologies. Flagpole designs limit the number of antennas that can be utilized and, in turn; limit the deployment of all available technologies for state-of-the-art wireless sites. In order to achieve the coverage objectives for the project site, at least 8 antennas are required. Applications were submitted for the addition of another carrier but the location of the added site was problematic for neighboring properties. The application was withdrawn by the applicant.

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2. **26915 Mesa Rock Road.** Two additional monopoles are located along I-15 at this address, just north of the ARCO gas station. This location is 1.6 miles east of the project site but does not provide coverage to the target coverage area. The monopoles are designed to cover the I-15 in north and south directions and a portion of Deer Springs heading west. Located here are AT&T (ZAP99-023), Sprint and T-Mobile (STP95-027W1). Verizon was recently approved for a MonoEucalyptus in this location, however, it is not built yet (P15-017). There is a mountain (1200' elevation) to the west of this site that blocks and deters visibility and coverage to Deer Springs.
3. **1219 Rancho Luiseno Road.** Verizon has a tower located at this address, permitted in 1988 (P88-074). Although there are no co-located carriers here, the tower is utilized as a hub for microwave connections throughout North County. Verizon's San Marcos site does not reach the Deer Springs area and is a blind spot for coverage, due to the terrain/topography. This site cannot be expanded or modified to cover the gap in coverage.
4. **3588 North Twin Oaks Valley Road.** A faux water tank was recently constructed by Verizon at this address (P13-006). Coverage for the North Twin Oaks Valley is the primary goal for this site but the site will not cover Deer Springs Road to the east as the project site will. This site will complement the coverage provided by the proposed site. Verizon's North Oaks site has multiple peaks that block the view of the intended coverage area. These peaks block the signal to the Deer Springs Road area. This site cannot be expanded or modified to cover the gap in coverage.

WATER TANKS

5. Vallecitos Water District operates a water treatment facility on North Twin Oaks Valley Road approximately 1.75 miles north west of the project site and only one-tenth of a mile from the North Twin Oaks Valley Road water tower site for Verizon. There are two water storage tanks at the District facility. The project site is too far north to provide coverage to the east along Deer Springs Road, one of the primary coverage objectives of the project site.

UTILITY POLES

Utility poles are located along Deer Springs Road below the project site. Ground elevation at the road is approximately 815 feet AMSL, approximately the same as the project site, which is 794 feet AMSL. The additional height provided by the 60-foot-tall mono-tree structure more than compensates for a lower antenna placement on a utility or light pole at street level along Deer Springs Road. Because of the limitations for placing more than one antenna per sector on utility poles, the poles along Deer Springs Road would not be able to serve the coverage area with adequate capacity.

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COUNTY OR GOVERNMENT FACILITIES

The Vallecitos Water District has treatment plant facility on North Twin Oaks Valley Road, approximately 1.75 miles northwest of the project site. This site is discussed above under "Water Tanks."

Additional Existing Sites in the Area

Additional existing sites in the area were identified to the west and are noted as numbers 7, 8, 9 and 10. All of these sites are located too far west to provide coverage to the target coverage area. Of these sites, there are two that have co-location on them already.

COMMERCIAL OR INDUSTRIAL BUILDINGS

6. One commercial property is in the area, approximately .65 mile east of the project site; it is the Golden Door Spa and is designated C42, visitor commercial. Due to a lack of interest on the part of the property owner, no further discussions for locating here were attempted.

The monopoles located at the I-15 and Mesa Rock Road (location #2) are zoned C30, commercial. These are discussed further under "Existing Sites."

COBRA STYLE STREET LIGHT

There are no Cobra Style Street Lights in the project area.

TRAFFIC LIGHT

There are no Traffic Lights in the project area.

UTILITY TOWERS

There are no Utility Towers in the project area.